Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte AKIHIRO NISHI

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Appeal No. 1997-1381
Application 08/188,925[1]

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Heard: October 06, 1999

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Before HAIRSTON, HECKER, and GROSS, Administrative Patent
Judges.

HECKER, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of

claims 1 through 23 and 27 through 32, all claims pending in

this application.

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[1] Application for patent filed January 31, 1994.

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The invention relates to an image printer. The printer

receives image data from a host computer. When a problem is

detected, such as a paper jam, the image data is compressed

and stored in a compressed format. Thus, when the image

printing function is suspended because of the detected

problem, the printer can continue to receive image data, thus

enabling the host computer to continue with other operations.

Because the image data received after the detection of a

problem is compressed, the image data can be stored in a

relatively small capacity memory.

Representative independent claim 1 is reproduced as

follows:

1.   a printer apparatus arranged to actuate an image
forming means based on a received print data for printing an
image based on the print data, said printer apparatus
comprising:

a detecting means for detecting trouble in the image
forming means,

a compressing means for initiating the compression
of the received print data upon detection of the trouble,

a memory means for memorizing the compressed data,

an expanding means for expanding data read from said
memory means, and

a control for instructing starting of said expanding

means after elimination of the trouble and also, for printing the image by the image forming means based on the expanded data.

The Examiner relies on the following references:

Maniwa et al. (Maniwa)	4,860,119	Aug. 22, 1989
Hirata	4,920,427	Apr. 24, 1990

Claims 4, 5, 6, 8, 10, 11, 12, 14, 16, 17, 19, 21, 23, 27, 29, 30 and 32 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Maniwa et al. Claims 1, 2, 3, 7, 9, 13, 15, 18, 20, 22, 28 and 31 stand rejected under 35 U.S.C. § 103 as being unpatentable over Maniwa et al. in view of Hirata.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the brief, reply brief, answer and supplemental answer for the respective details thereof.

<u>OPINION</u>

After a careful review of the evidence before us, we will not sustain the rejection of claims 4, 5, 6, 8, 10, 11, 12, 14, 16, 17, 19, 21, 23, 27, 29, 30 and 32 under 35 U.S.C. § 102 (b), and we will not sustain the rejection of claims 1, 2, 3, 7, 9, 13, 15, 18, 20, 22, 28 and 31 under 35 U.S.C. § 103.

With regard to the 35 U.S.C. § 102(b) rejection of claim 4, it is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. See In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984). "Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention." RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984), *cert. dismissed,* 468 U.S. 1228 (1984), citing Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983).

Claim 4 requires, among other things:

       a detecting means for detecting trouble of the
print means,
       a compressing means for initiating the
compression of the print data inputted from said
external device **when the trouble** of the print means
is detected, (Emphasis added.)

In applying the Maniwa reference, trouble of the print

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means is the occurance of a paper jam. The Examiner and

Appellant go back and forth regarding the issue of whether

Maniwa compresses and stores print data **upon occurance of a**

jam (Examiner's position) or, Maniwa compresses and stores

print data **upon receipt from a host computer** and uses it to

correct a jam (Appellant's position). Appellant argues that

since Maniwa compresses and stores data **when the data is**

received, the claim 4 limitation recited supra is not met by

Maniwa. An example of some of the back and forth positions is

presented below.

　　The Examiner contends:

　　Maniwa et al discloses at column 15, lines 55-58,
　　"image data supplied from the host system is
　　compressed and is then stored as backup data when
　　paper jamming occurs". In addition, Maniwa et al
　　discloses in column 36, lines 24-27, "As described
　　previously, in the present printer controller 130,
　　the backup buffers 191 are formed in the RAM 133 in
　　order to recover data which would be lost if the
　　paper is jammed". Finally, at column 37, line 6+,
　　Maniwa et al discloses "When the backup is
　　unnecessary, the process proceeds to step 1036 where
　　the image data is stored into the temporary memory.
　　Alternatively when it is detected at step 1032 that
　　the backup is necessary, it is checked at step 1033
　　as to whether or not the image data should be
　　compressed". (Answer-pages 10 and 11.)

Appellant argues:

The Examiner has relied heavily on a statement
in the prior art reference at column 15, lines 55-
58, which states that "image data supplied from host
system is compressed and is then stored as backup
data when paper jamming occurs".
The sentence is ambiguous because the phrase
"when paper jamming occurs" could be interpreted to
apply to the compression and storage steps together,
or, alternatively, it could be interpreted as
applying only to the storage step.
The Examiner has interpreted this statement as
if the "when paper jamming occurs" phrase applies to
both the compression and the storage steps.
However, as set forth in the Brief for the
Appellant, the Examiner's interpretation is
inconsistent with the remainder of the reference.
If the Examiner's interpretation was correct,
there would be no compression of the data until a
paper jam occurs. Thus, there would be no
compressed data in the backup buffer region unless a
paper jam occurs. However, attention is directed to
column 36, lines 61-63, wherein it states that when
a page is completely discharged, i.e., successfully
printed, the data is canceled from the backup buffer
region. If the Examiner's interpretation was
correct, there would be no reason for data to be in
the backup buffer if a page was completely
discharged, because according to the Examiner's
position, data is only compressed and stored upon
the detection of a paper jam. Thus, according to
the Examiner's position, it would be impossible for
data in the backup buffer to be canceled if a page
was completely discharged. (Reply brief-pages 1 and
2.)

The Examiner responds:

(a)Attention is directed to column 36, lines 61-
63, wherein the recitation is "When data regarding a

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page which has been completely discharged is
cancelled from the backup buffer region." The
recitation **does not mention** "i.e. successfully
printed", it is the Appellant interpretation that
"When data regarding a page which has been
completely discharged" means "i.e. successfully
printed."
(B) If the Appellant interpretation is correct,
image data supplied from the host system is
compressed and is then stored as backup data **when
paper jamming occurs**; (see column 15, lines 55-58)
and (see column 36, lines 24-27), so that eventually
the image data can be printed once the paper jam is
corrected or eliminated. This is the reason why the
image data is saved in the backup buffer. Once the
paper jamming is corrected or eliminated, and "When
data regarding a page which has been completely
discharged" as noted at column 36, lines 61-63,
(under the JAM BACKUP), (meaning after the paper jam
is corrected or eliminated, otherwise the print data
cannot be printed), the image data in the backup
buffer is not needed any longer and therefore it is
cancelled from the backup buffer region, because the
image data was "i.e. successfully printed".
(Supplemental answer-pages 2 and 3.)

We have carefully reviewed Maniwa and can understand how

it is possible to interpret this reference in the two opposing

ways presented by the Examiner and the Appellant. However, we

agree with the Appellant that the weight of the evidence

favors Appellant's interpretation.

Column 37, lines 4-6 recite:

The CPU 131 in the printer controller 130 looks
up the designated information on the backup at the
time of inputting the image data at step 1031 of

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FIG. 34.

Thus, Figure 34 is directed to image data **at the time of input, not at the time of jam**. At the time of data input, Figure 34 determines which mode has been selected. If the backup/compressed data mode had been selected (mode 2, column 15, lines 55-58), the flow chart of Figure 34 would progress as follows:

1031   Image data input.

1032   Yes, backup has been selected.

1033   Yes, backup with compression has been selected.

1034   Image data is compressed.

1035   Compressed data is stored in backup buffer 191.

As this scenario shows, data compression takes place upon data input from the host computer. Data compression does not hinge on the detection of a jam as claimed.

For these reasons, we will not sustain the rejection of claim 4.

As noted by the Appellant in footnote 3, page 5 of the Brief, and verified by us, each of the independent claims in

this application includes the element discussed above that

links initiating compression of data upon detection of

trouble, i.e., a

jam. Since Maniwa does not teach this limitation, we will not

sustain the 35 U.S.C. § 102(b) rejection of any claims.

Since the Examiner has not indicated this limitation to

be obvious over Maniwa and/or Hirata, we will not sustain the

35 U.S.C. § 103 rejection of any claims.

In view of the foregoing, the decision of the Examiner

rejecting claims 4, 5, 6, 8, 10, 11, 12, 14, 16, 17, 19, 21,

23, 27, 29, 30 and 32 under 35 U.S.C. § 102(b) is reversed.

Likewise, the decision of the Examiner rejecting claims 1, 2,

3, 7, 9, 13, 15, 18, 20, 22, 28 and 31 under 35 U.S.C. § 103

is reversed.

<u>REVERSED</u>

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        Kenneth W. Hairston              )
        Administrative Patent Judge   )
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                                        ) BOARD OF PATENT
        Stuart N. Hecker                )
        Administrative Patent Judge   )    APPEALS AND
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                                        )   INTERFERENCES
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        Anita Pellman Gross             )
        Administrative Patent Judge   )
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